Irving Tanning Company
Somerset County
Hartland, Maine
A-252-70-A-I

DEPARTMENTAL
FINDINGS OF FACT AND ORDER
PART 70 AIR EMISSION LICENSE

After review of the Initial Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Irving Tanning Company
LICENSE NUMBER	A-252-70-A-I
LICENSE TYPE	Initial Part 70 License
NAIC CODES	3111
NATURE OF BUSINESS	Leather Tanning and Finishing
FACILITY LOCATION	Main Street, Hartland
DATE OF LICENSE ISSUANCE	August 11, 2004
LICENSE EXPIRATION DATE	August 11, 2009

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

Fuel Burning Equipment

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
Boiler #1	33.5 MMBtu/hr	Fuel Burning Equipment
Boiler #2	20.3 MMBtu./hr	Fuel Burning Equipment
Boiler #3	22.2 MMBtu./hr	Fuel Burning Equipment
Boiler #1A	20.9 MMBtu./hr	Fuel Burning Equipment
Boiler #2A	20.3 MMBtu./hr	Fuel Burning Equipment
Boiler #3A	8.4 MMBtu./hr	Fuel Burning Equipment
Boiler #1H	3.3 MMBtu./hr	Fuel Burning Equipment

Process Equipment

Equipment		# of Units	Pollution Control Equipment
Wet End Process	Wheels	47	none
	Dryers	14	none
	Wringers	6	none

Process Equipment (Continued)

Finishing Process	Spray Machines	9	Dry Filters
	Roll Coater	7	none
	Steam Dryer	14	none
	R & D Area	8	none
	Printers	1	none
	Off-Line Dryers	2	none
	Acrylic Coating Lines	1	none
Buffing (Main Bldg.)	Buffers & Dust Removal	3	Dust Scrubber
	Dry Mills	5	Dust Scrubber
Buffing (Annex Bldg.)	Buffers & Dust Removal	7	Dust Scrubber
	Dry Mills	13	none
	Roll Coater #10	1	none
	Roll Coater #11	1	none

Irving Tanning has additional insignificant activities which do not need to be listed in the emission equipment table. A list of these insignificant activities can be found in Irving Tanning's Title V application on page 9, Table 1 and in Appendix 2, filed with the DEP on October 10, 1996.

C. Application Classification

The application for Irving Tanning does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Overview

Irving receives chrome-tanned hides ("blue stock") and processes the hides into finished leather, to be used for many products. The hides are processed by wet and mechanical techniques. The plant is currently capable of processing approximately 10,000 sides/day and 10,000 splits/day.

Irving performs the following operations on the received blue stock hides, each of which are summarized below:

1. Splitting and Shaving	-	Main Building
2. Retanning	-	Main Building
3. Coloring	-	Main Building
4. Fatliquoring	-	Main and Annex Building
5. Drying	-	Main and Annex Building
6. Buffing	-	Annex Building
7. Finishing	-	Annex Building

1. Splitting and Shaving
   Due to the variability in the thickness of the hides, the hides are first split to the required thickness. The hides are fed through splitting machines, with the grain side up, yielding a grain portion of uniform thickness. The underneath, or flesh layer, that is cut off is called a split. The splits are sold by Irving to companies that produce sueded types of leather and are not processed on site.

   The grain portion of the leather is then shaven. The shaving machines utilize helical shaped cutting blades, similar to fleshing machines which are used in the tanning process. The shaving machines are used to level the overall hide thickness to exact specifications and open the fiber structure to better receive subsequent chemical processing.

   The hides are then placed in large rotary drums to perform the following three "wet end" operations: Retanning, Coloring, and Fatliquoring. They are listed as three separate operations, however they follow one another without interruption, perform vastly different purposes and require a total time of approximately 4 to 8 hours.

2. Retanning
   The retanning operation gives the tanner an opportunity to combine the desirable properties of more than one tanning agent in the leather. Common additives utilized for this purpose are vegetable extracts derived from trees and shrubs, syntans, and mineral retanning agents in aqueous solutions. The hides are retanned in the large cylindrical rotary drums oriented with the axis horizontal. The hides are first washed and neutralized within the drums with a mild alkaline or acid chemicals to adjust both the temperature and the pH. Liquid chemicals are then input through the horizontal shaft and the drums are rotated continuously for about 1 to 2 hours. Dry chemicals are added manually.

3. Coloring
   The hides are colored using aniline type dyes, which are derived primarily from petroleum. The dyes are dissolved in hot water and then added to the rotary drums through the hollow horizontal axle. The dyes combine with the hide fibers to form an insoluble compound which becomes part of the hide itself. The hides are then washed to eliminate residual dye and acids, etc., and to adjust the temperature required for the fatliquoring process.

4. Fatliquoring
   Fatliquoring occurs within the drums and lubricates the fibers for flexibility and softness. It also adds to the pliability and tensile strength of the leather. The basic ingredients in fatliquors consist of oil and related fatty substances which represent products from animal, vegetable, and mineral sources. The fatliquors themselves are not soluble in water, however, they can be made to react with certain chemicals that impart solubility to them.

   The hides are now finished with the "wet end" operations.

5. Drying
   The hides are dried to smooth the grain and remove excess moisture. First, the hides may be treated by a term called "setting out", which is a multi-purpose operation to smooth and stretch the hide while compressing and squeezing out excess moisture. The hides are hung by various methods and are transported through large "drying oven processes" by means of conveying systems. The "drying oven processes" consists of various methods including Pasting, Vacuum Drying, Hanging and Toggle Drying. The hides are dried to remove all but an equilibrium moisture.

6. Buffing
   To smooth the grain surface of the leather and remove any signs of natural healed scratches or parasitic damage the hides may then be buffed. Buffing is performed by a machine with a sanding cylinder, covered with an abrasive coated material, which simultaneously collects and removes the dust created by this operation. At Irving there are several types of buffing machines including lightenings, nappers, band and drum buffers, whole hide buffers, and dust removal machines (DRMs).

7. Finishing
   Finishing is a method by which film-forming materials are applied to the grain, to provide abrasion and stain resistance and also enhance the color. The finish also provides the final surface coloration, appearance, and texture. Water repellence can also be imparted. Coatings are prepared on-site. The following is a description of a typical finishing operation.

First, an acrylic emulsion is applied (water is the vehicle, and the acrylic resins are thermoplastic polymers or copolymers). The emulsion sometimes contains butyl cellosolve (ethylene glycol monobutylether). Glycol ethers are used because they assist penetration in the grain of the leather. The coating is applied using a rotating spray gun, and then the hide is dried in an oven.

This operation may be followed by mechanical operations, and then by two coats of a pigmented water-phase acrylic. Finally, a solvent top coat would be applied. In general, the base coats are aqueous-borne, and the topcoats are VOC borne.

The application of the finishing coats are performed by rotary-gun sprayers. Either 8 or 16 guns on each rotary sprayer may be mounted, but typically only eight guns are used. The leather side is transported on a wire support structure, with electronic sensors located below each spray gun. The sensors send signals to the spray equipment to operate only when leather is underneath it, thereby controlling overspray. Booth air is drawn horizontally through the booth, and must be maintained of sufficient volume to keep the exhaust VOC concentration to less than the Lower Explosion Limit (LEL), and to capture the particulate overspray. Each rotary spray booth is followed by a propane heated oven. Other VOC coating operations at the facility include two roll coaters (Lines #10 and 11), and an R&D line, all located at the Annex Building.

VOC BACT Analysis for the Finishing Operation:

Irving performed a Best Available Control Technology (BACT) analysis to determine the level of emission control that must be applied to the modified process which eliminated the finishing of split leather. Two approaches were evaluated: the use of oxidizing equipment and product substitution.

<u>Oxidizing Equipment</u>

Oxidizers were evaluated as a possible control technology for the finishing operations at Irving Tanning. Due to the substantial expense to purchase and install an oxidation system, as well as the unit not being able to run at a self-sustaining level, oxidizers were rejected as representing BACT.

<u>Product Substitution</u>

Product Substitution has been in place at Irving Tanning and proven to be successful. VOC emissions have been reduced by 60% over the past 10 years. Irving Tanning has an on-going program for testing new products for reduced environmental impacts. Product substitution has been determined to be BACT.

Conclusion

By continuing product substitution, the overall tons per year of VOC emissions from finishing operations will be reduced. Also, the calendar monthly pounds of VOC per thousand square feet processed will also be reduced. The square feet of processed leather is the surface area of the leather upon exiting the leather finishing operation. The following table details the change in emissions from the finishing process:

Limits in effect until March 1, 2005

	Previously licensed limits	Title V limits (BACT)
Calendar Monthly #/1000 ft^2	38.0	35.0
Year Total #/1000 ft^2	14.0	20.0
12-month rolling total	525 TPY	260 TPY

The following table details the emission limits from the finishing process based on operational data for the months of February, March and April of 2004:

Limits in effect March 1, 2005

	Previously licensed limits	Title V limits (BACT)
Calendar Monthly #/1000 ft^2	38.0	20
Year Total #/1000 ft^2	14.0	10
12-month rolling total	525 TPY	260 TPY

Periodic Monitoring

For VOC BACT/RACT:

Length of each downtime for the electronic eyes on the spray lines. Downtime is defined as when the electronic eyes are not operated per the manufacturer's specifications and the duration of the overspray event lasts more than one minute.

Year Total #/1000 square feet means pounds of VOC per 1000 square feet of leather processed on a 12-month rolling average.

Total VOCs emitted on a 12 month basis (June 1 to May 31).

For HAP MACT:

Additional periodic monitoring effective after **February 28, 2005** required by 40 CFR Part 63, Subpart TTTT.

B. Boilers:

Boiler #1 was manufactured by Cleaver Brooks in 1977 with a maximum design heat input capacity of 33.5 MMBtu/hr firing #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 223 gallons per hour. Boiler #1 is not subject to NSPS requirements at this time. Emissions from Boiler #1 exhaust through common Stack #1.

Boiler #2 was manufactured by the Ames Boiler Company in 1953 with a maximum design heat input capacity of 20.3 MMBtu/hr firing #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 135 gallons per hour. Boiler #2 is not subject to NSPS requirements at this time. Emissions from Boiler #2 exhaust through common Stack #1.

Boiler #3 was manufactured by the Ames Boiler Company in 1955 with a maximum design heat input capacity of 22.2 MMBtu/hr firing #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 148 gallons per hour. Boiler #3 is not subject to NSPS requirements at this time. Emissions from Boiler #3 exhaust through common Stack #1.

Boiler #1A is an Ames boiler manufactured in 1975 with a maximum design heat input capacity of 20.9 MMBtu/hr firing #5 or #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 139 gallons per hour. Boiler #1A is not subject to NSPS requirements at this time. Emissions from Boiler #1A exhaust through common Stack #1A.

Boiler #2A was manufactured by the Keanee Boiler Company in 1973 with a maximum design heat input capacity of 20.3 MMBtu/hr firing #5 or #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 135 gallons per hour. Boiler #2A is not subject to NSPS requirements at this time. Emissions from Boiler #2A exhaust through common Stack #1A.

Boiler #3A was manufactured by Cleaver Brooks in 1976 with a maximum design heat input capacity of 8.4 MMBtu/hr firing #5 or #6 fuel oil (2.0% sulfur maximum by weight as documented through supplier fuel receipts) with a maximum firing rate of 56 gallons per hour. Boiler #3A is not subject to NSPS requirements at this time. Emissions from Boiler #3A exhaust through common Stack #1A.

Boiler #1H was manufactured by Cleaver Brooks in 1968 with a maximum design heat input capacity of 3.3 MMBtu/hr firing #2 fuel oil with a maximum firing rate of 22 gallons per hour. Boiler #1H is not subject to NSPS requirements. Emissions from Boiler #1H exhaust through Stack #1H.

Streamlining for Boilers 1, 2, 3, 1A, 2A, 3A and 1H

1. Fuel sulfur content is regulated by Chapter 106. The Best Available Control Technology (BACT) sulfur limit for Boiler 1H is more stringent.
2. Chapter 103 regulates PM emission rates. BACT is more stringent.
3. Chapter 101, Section 2(D) is applicable for visible emissions.
4. Chapter 138, NO_x RACT, Section 3(L) is applicable for Boilers 1, 2, 3, 1A and 2A.

Periodic Monitoring

Boiler 1

Fuel oil record keeping which includes records indicating the quantity of the type of fuel delivered as well as the percent sulfur by weight.

Boilers 2, 3, 1A, 2A, 3A and 1H

Fuel oil record keeping which includes records indicating the quantity of the type of fuel delivered as well as the percent sulfur by weight.

Based on the boilers being operated in a manner consistent with good air pollution control practices, it is unlikely the boilers will exceed the opacity limit. Therefore, periodic monitoring by the source for opacity in the form of visible emission testing is not required. However, neither the EPA nor the state is precluded from performing its own testing and may take enforcement action for any violations discovered.

Boilers 3A and 1H

Irving shall clean the oil guns once per year and keep a maintenance log for each boiler. The log shall include any work performed on the boiler as well as oil gun cleaning frequencies.

Boilers 1, 2, 3, 1A and 2A

Annual tune-up and subject to the following NO_x RACT tune-up record keeping requirements:

a. A tune-up record file must be kept on-site and made available to the Department upon request,
b. An oxygen/carbon monoxide curve or an oxygen/smoke curve must be kept on file,
c. Once the optimum excess oxygen setting has been determined, the owner or operator of a source must verify the setting remains at that value by December 31 of each year,
d. If the minimum oxygen level found is substantially higher than the value provided by the combustion unit manufacturer, the owner or operator must improve the fuel and air mixing, thereby allowing operation with less air.

D. Facility Emissions

Total Annual Emissions for the Facility

Based on all boilers operating 8,760 hours per year and 260.0 tons of VOC from the tanning process, based on a 12-month rolling total
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC	Single HAP	Total HAP
#6 Fuel Oil	24.8	24.8	259.1	61.9	4.1	1.1	--	--
#2 Fuel Oil	0.2	0.2	0.9	0.6	0.1	0.8	--	--
Process	--	--	--	--	--	260.0	45.0	55.0
Total TPY	**25.0**	**25.0**	**260.0**	**62.5**	**4.2**	**261.9**	**45.0**	**55.0**

III. AIR QUALITY ANALYSIS

There have been no modifications to the facility therefore the existing ambient air quality analysis performed for Irving's previous Air Emission License A-252-71-A-R, which demonstrated compliance with Maine Ambient Air Quality Standards and Class I and Class II Increments, is sufficient for this initial Part 70 license.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-252-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standards and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Irving pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

Standard Statements

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both; [MEDEP Chapter 140]

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [MEDEP Chapter 140]

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [MEDEP Chapter 140]

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license; [MEDEP Chapter 140]

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 140]

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or

(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated October 10, 1996.

SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Boilers #1, #2, #3, #1A, #2A, #3A, #1H	40 CFR Part 60 Subpart Db	Standards of Performance for steam generating units with a maximum heat input rate greater than 100 MMBtu/hr.	All units have a heat input less than 100 MMBtu/hr.
Facility	40 CFR Part 61, Subpart V	Subpart is applicable to pumps, compressors, pressure relief devices, valves, flanges, and control devices that operate in volatile hazardous air pollutant (VHAP) service. VHAP includes only Benzene and Vinyl Chloride.	No equipment in benzene or vinyl chloride service at the Irving Tanning facility.
Facility	40 CFR Part 63, Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.	Affects styrene/butadiene rubber production, polybutadiene rubber production and processes producing certain agricultural chemicals. No affected units at Irving.
Facility	40 CFR Part 63, Subpart T	Standards of Performance for Halogenated Solvent Cleaners	For solvent cleaners containing methylene chloride, perchloroethylene, 1,1,1, trichloroethane, carbon tetrachloride, or chloroform. Irving does not operate solvent cleaners at the facility.
Facility	Chapter 129	Surface Coating Facilities	Irving Tanning does not operate any surface coating operations outlined in this regulation
Facility	Chapter 135	Hexavalent Chromium Particulate Emission Standard	Irving Tanning does not operate any applicable equipment.

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the

original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[MEDEP Chapter 140]

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license. [MEDEP Chapter 140]

Standard Conditions

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license [38 MRSA §347-C];

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140; [MEDEP Chapter 140]

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request; [MEDEP Chapter 140]

Enforceable by State-only

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; [MEDEP Chapter 140] **Enforceable by State-only**

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license; [MEDEP Chapter 140]

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [MEDEP Chapter 140]

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

2. to demonstrate compliance with the applicable emission standards; or

3. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 140] **Enforceable by State-only**

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[MEDEP Chapter 140] **Enforceable by State-only**

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license. [MEDEP Chapter 140]

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [MEDEP Chapter 140]

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

A. The identification of each term or condition of the Part 70 license that is the basis of the certification;

B. The compliance status;

C. Whether compliance was continuous or intermittent;

D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

E. Such other facts as the Department may require to determine the compliance status of the source;

[MEDEP Chapter 140]

SPECIAL CONDITIONS

(14) Boiler #1:

A. The sulfur content of the fuel oil fired in Boiler #1 (33.5 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable
NO_x	0.50	MEDEP Chapter 140, BPT	State Only

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	6.70	MEDEP Chapter 140, BPT	State Only
PM_{10}	6.70	MEDEP Chapter 140, BPT	State Only
SO_2	70.13	MEDEP Chapter 140, BPT	State Only
NO_X	16.75	MEDEP Chapter 140, BPT	State Only
CO	1.12	MEDEP Chapter 140, BPT	State Only
VOC	0.29	MEDEP Chapter 140, BPT	State Only

(15) Boiler #2:

A. The sulfur content of the fuel oil fired in Boiler #2 (22.2 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #2 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable
NO_x	0.50	MEDEP Chapter 140, BPT	State Only

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	4.44	MEDEP Chapter 140, BPT	State Only
PM_{10}	4.44	MEDEP Chapter 140, BPT	State Only
SO_2	46.47	MEDEP Chapter 140, BPT	State Only
NO_x	11.10	MEDEP Chapter 140, BPT	State Only
CO	0.74	MEDEP Chapter 140, BPT	State Only
VOC	0.19	MEDEP Chapter 140, BPT	State Only

(16) Boiler #3:

A. The sulfur content of the fuel oil fired in Boiler #3 (20.3 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #3 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable
NO_x	0.50	MEDEP Chapter 140, BPT	State Only

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	4.06	MEDEP Chapter 140, BPT	State Only
PM_{10}	4.06	MEDEP Chapter 140, BPT	State Only
SO_2	42.49	MEDEP Chapter 140, BPT	State Only
NO_x	10.15	MEDEP Chapter 140, BPT	State Only
CO	0.68	MEDEP Chapter 140, BPT	State Only
VOC	0.17	MEDEP Chapter 140, BPT	State Only

(17) Boiler #1A:

A. The sulfur content of the fuel oil fired in Boiler #1A (20.9 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #1A shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable
NO_x	0.50	MEDEP Chapter 140, BPT	State Only

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	4.18	MEDEP Chapter 140, BPT	State Only
PM_{10}	4.18	MEDEP Chapter 140, BPT	State Only
SO_2	43.75	MEDEP Chapter 140, BPT	State Only
NO_X	10.45	MEDEP Chapter 140, BPT	State Only
CO	0.70	MEDEP Chapter 140, BPT	State Only
VOC	0.19	MEDEP Chapter 140, BPT	State Only

(18) Boiler #2A:

A. The sulfur content of the fuel oil fired in Boiler #2A (20.3 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #2A shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable
NO_x	0.50	MEDEP Chapter 140, BPT	State Only

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	4.06	MEDEP Chapter 140, BPT	State Only
PM_{10}	4.06	MEDEP Chapter 140, BPT	State Only
SO_2	42.49	MEDEP Chapter 140, BPT	State Only
NO_X	10.15	MEDEP Chapter 140, BPT	State Only
CO	0.68	MEDEP Chapter 140, BPT	State Only
VOC	0.17	MEDEP Chapter 140, BPT	State Only

(19) Boiler #3A:

A. The sulfur content of the fuel oil fired in Boiler #3A (8.4 MMBtu/hr) shall not exceed 2.0% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #3A shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.20	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable

Pollutant	lb/hour	Origin and Authority	Enforceability
PM	1.68	MEDEP Chapter 140, BPT	State Only
PM_{10}	1.68	MEDEP Chapter 140, BPT	State Only
SO_2	17.58	MEDEP Chapter 140, BPT	State Only
NO_x	4.2	MEDEP Chapter 140, BPT	State Only
CO	0.28	MEDEP Chapter 140, BPT	State Only
VOC	0.07	MEDEP Chapter 140, BPT	State Only

(20) Boiler #1H:

A. Only #2 fuel oil shall be fired in Boiler #1H (3.3 MMBtu/hr) demonstrated by purchase records from the supplier indicating the type of fuel supplied. [MEDEP Chapter 140, BPT]

B. Emissions from Boiler #1H shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.10	MEDEP Chapter 103, Section 2(A)(1)	Federally Enforceable

Pollutant	lb/hour	Origin and Authority
PM	0.33	MEDEP Chapter 140, BPT
PM_{10}	0.33	MEDEP Chapter 140, BPT
SO_2	1.67	MEDEP Chapter 140, BPT
NO_x	1.16	MEDEP Chapter 140, BPT
CO	0.12	MEDEP Chapter 140, BPT
VOC	0.01	MEDEP Chapter 140, BPT

(21) Combined fuel use in Boiler 1, 2, 3, 1A, 2A and 3A shall not exceed 1,650,000 gal/year of #6 fuel oil (12 month rolling total), with a sulfur content not to exceed 2.0% by weight. Fuel use records (showing the quantity and percent sulfur of the fuel) for the boilers shall be maintained to demonstrate compliance. [MEDEP Chapter 140, BPT]

(22) Fuel use in Boiler 1H shall not exceed 25,000 gal/year of #2 fuel oil (12 month rolling total). Fuel use records (showing the quantity and documenting the fuel is #2 fuel oil) for Boiler 1H shall be maintained to demonstrate compliance. [MEDEP Chapter 140, BPT]

(23) Visible emissions from common Stack #1 when two or more boilers are operating (Boilers #1, #2, and #3) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than three (3) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

Visible emissions from common Stack #1 when only one boiler is operating (Boilers #1, #2, or #3) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

(24) Visible emissions from common Stack #1A when two or more boilers are operating (Boilers #1A, #2A, and #3A) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than three (3) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

Visible emissions from common Stack #1A when only one boiler is operating (Boiler #1A, #2A, or #3A) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

(25) Opacity for Boiler #1H shall not exceed 20 percent on a six (6) minute block average basis, except for one (1) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 140, BPT]

(26) Irving shall clean the oil guns in Boiler #3A and #1H once per year and keep a maintenance log for Boiler #3A and #1H. The log shall include any work performed on the boiler as well as oil gun cleaning frequencies. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

(27) NO_x RACT Requirements

Boilers #1, #2, #3, #1A and #2A are each required to have an annual tune-up (if the boiler is operated more than 168 hours in any quarter. If this occurs in the 4th quarter then the tune-up may be postponed (or deferred) for 30 days from the end of the quarter. If the postponement carries the tune-up into the next calendar year then the obligation for an annual tune-up for that calendar year will also have been met) and are subject to the following NO_x RACT tune-up record keeping requirements:

A. A tune-up record file must be kept on-site and made available to the Department upon request,
B. An oxygen/carbon monoxide curve or an oxygen/smoke curve must be kept on file,
C. Once the optimum excess oxygen setting has been determined, the owner or operator of a source must verify the setting remains at that value by **December 31** of each year, and
D. If the minimum oxygen level found is substantially higher than the value provided by the combustion unit manufacturer, the owner or operator must improve the fuel and air mixing, thereby allowing operation with less air.

[MEDEP Chapter 138]

(28) Buffing Operation

A. Visible emissions from the Buffing Operation's Main Building Stack #2 and #3 shall not exceed 10% opacity on a 6 minute block average basis, except for no more than 1 six minute block average in a one hour period.
B. Visible emissions from the Buffing Operation's Annex Building Stack #2A (which is comprised of a group of stacks) shall not exceed 10% opacity on a 6 minute block average basis, except for no more than 1 six minute block average in a one hour period.

C. No more than 10 buffing units may be in operation at the Main Building and no more than 20 buffing units may be in operation at the Annex Building. Irving may request a revision of this license to allow more units to be in operation. Such a request may require Irving to perform additional testing to demonstrate the Water Control systems can maintain the 90% particulate removal efficiency while more units are in operation.

[MEDEP Chapter 140, BPT]

(29) Finishing Operation

Visible emissions from the Finishing Operations spray booth stacks shall not exceed 10% opacity on a 6 minute block average basis, except for no more than 1 six minute block average in a one hour period. [MEDEP Chapter 140, BPT]

(30) Conditioning Lines

The two conditioning lines will be located in the downtown portion of the Irving facility. Each unit will vent outside of the building. Visible emissions from the vent shall be limited to no greater than 10% opacity, excluding water vapor, on a 6-minute block average basis. [MEDEP Chapter 140, BPT]

(31) VOC BACT/RACT Limits and Requirements [MEDEP Chapter 134, BPT]

A) The total VOC emissions from the Irving Tanning Facility (Main Building and Annex Building) shall not exceed:

	Limit until March 1, 2005	Limit in effect on March 1, 2005
Calendar Monthly	35.0#/1000 ft^2 processed	20.0#/1000 ft^2 processed
Year Total	20.0#/1000 ft^2 processed	10.0#/1000 ft^2 processed

$$Actual\ \frac{\#VOC}{1000\ ft^2} = \frac{Total\ \#VOC}{Total\ ft^2\ leather\ processed} \times (1000)$$

Where:

$$Pounds\ of\ finish\ used = (Beginning\ weight\ of\ finish\ used) - (End\ weight\ of\ finish\ used)$$

$$Total\ \#VOC = (Percent\ VOCs\ in\ finish) \times (Pounds\ of\ finish\ used)$$

$$Total\ ft^2\ leather\ processed = (number\ of\ sides\ processed) \times \left(\frac{22.5\ ft^2}{side}\right)$$

Note: On average, there are 22.5 ft^2 of surface area per trimmed side of leather. Finish operations process untrimmed leather, thus increasing the conservative nature of these calculations.

B) 260.0 tons of VOC per year on a 12 month basis, where:

i. the 12 months shall be June 1 to May 31; and

ii. the tons of VOC emissions are documented by: the finish formula used (from MSDS or manufacturer information), the beginning amount of finish material used, the end amount of finish material used.

C) Irving shall submit the above monthly limit demonstrations as part of the semi-annual reports due January 31 and July 31 of each year. Compliance with the year total limit will be demonstrated at the end of the 12-month rolling average period, as part of the annual compliance certification report due January 31 of each year.

(32) Total VOC emissions from Lines #10 and #11 shall not exceed 39.9 tons per year on a 12-month rolling total basis. VOC emissions shall be calculated from the VOC content of all material that is used on Line #10 and Line #11. [MEDEP Chapter 140, BPT]

(33) HAP emissions from Irving shall not exceed [MEDEP Chapter 134, BPT]:

A. A facility wide limit of 45.0 tons per year of any one single HAP (12 month rolling total)

B. A facility wide limit of 55.0 tons per year of total HAPs (12 month rolling total)

C. The record keeping documenting the above limits for HAPs shall be based on: the finish formula used (from MSDS or manufacturer information), the beginning amount of finish material used, the end amount of finish material used.

(34) Irving Tanning shall meet the requirements of 40 CFR Part 63, Subpart TTTT by **February 28, 2005**.

(35) Irving shall utilize electric eyes on all automatic spray lines at all times that the lines are operating. The electric eyes shall be maintained and operated according to the manufacturer's specifications and operating procedures, with the length of each downtime recorded in the semi-annual report. Downtime is defined as when the electronic eyes are not operated per the manufacturer's specifications and the duration of the overspray event lasts more than one minute.
[MEDEP Chapter 140, BPT] **Enforceable by State-only**

(36) Irving shall utilize high volume low pressure (HVLP) spray guns for all manual spraying and on all automatic spray lines at all times that the lines are operating. The HVLP guns shall be maintained and operated according to the manufacturer's specifications and operating procedures.
[MEDEP Chapter 140, BPT] **Enforceable by State-only**

(37) Irving shall develop Standard Operating and Maintenance Procedures (SOMP) to minimize VOC losses, and post these procedures at the appropriate locations within the facility. These procedures shall contain at a minimum:

A. A procedure to minimize the volatilization of solvents during the measuring of coating proportions and/or mixing of coatings;

B. A procedure to minimize VOC fugitive losses from the coating and solvent storage rooms. Procedures should include methods of securely sealing containers and methods to clean up accidental spills.

C. A procedure to minimize solvent usage or VOC losses during equipment cleanup, and during transport (including the transferring of coatings from the mixing areas to the coating lines).

The SOMP plan shall become part of the BPT plan. Irving shall periodically review, at least annually, the SOMP plan for completeness and updating purposes. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

(38) **Recordkeeping Requirements**

A. Periodic Monitoring:
   1. #6 fuel oil sulfur content.
   2. 12-month rolling total of #6 fuel oil purchased for use in Boiler 1, 2, 3, 1A, 2A and 3A (combined).
   3. 12-month rolling total of #2 fuel oil purchased for use in Boiler 1H.
   4. Boiler #3A annual oil gun cleaning documentation as well as boiler work performed log.
   5. Boiler #1H annual oil gun cleaning documentation as well as boiler work performed log.
   6. Boiler #1 annual tune-up documentation.
   7. Boiler #2 annual tune-up documentation.
   8. Boiler #3 annual tune-up documentation.
   9. Boiler #1A annual tune-up documentation.
   10. Boiler #2A annual tune-up documentation.
   11. Pounds of VOC per 1000 square feet of leather processed on a calendar month basis.
   12. Tons of VOC emissions per calendar month.
   13. Tons of VOC emissions from June 1 to May 31.
   14. Automatic spray line electronic eye downtime log.
   15. 12-month rolling total of VOC emissions from roll coater Line #10.
   16. 12-month rolling total of VOC emissions from roll coater Line #11.
   17. Tons of individual HAP emissions – 12 month rolling total.
   18. Tons of total HAP emissions – 12 month rolling total.

B. Additional periodic monitoring effective after **February 28, 2005** required by 40 CFR Part 63, Subpart TTTT.

(39) **Semiannual Reporting** [MEDEP Chapter 140]

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and January 31st of each year with the initial semiannual report due **January 31, 2005**. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.

A. Each semiannual report shall include a summary of the periodic monitoring required by Special Condition (36).

B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(40) **Annual Compliance Certification**

Irving shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31 of each year with the initial annual certification due **January 31, 2005**. The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [MEDEP Chapter 140]

(41) A. **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

   or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted no later than September 1 or as otherwise specified in Chapter 137.

B. **Hazardous Air Pollutant Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall report every three years (2005, 2008, etc.) to the Department the information necessary to accurately update the State's toxic air pollutants emission inventory by means

of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted no later than September 1 of the appropriate year, or as otherwise specified in Chapter 137.

(42) **Units Containing Ozone Depleting Substances**
When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs.
[40 CFR Part 82, Subpart F]

(43) **Asbestos Abatement**
When undertaking Asbestos abatement activities, the licensee shall comply with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

(44) The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(45) **Certification by a Responsible Official**
All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official.
[MEDEP Chapter 140]

(46) Irving shall pay the annual air emission license fee within 30 days of **September 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
DAWN R. GALLAGHER, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES
Date of initial receipt of application: October 23, 1996
Date of application acceptance: October 28, 1996

Date filed with Board of Environmental Protection _____

This Order prepared by Mark E. Roberts, Bureau of Air Quality